AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheets of corrected formal drawings. The corrected formal drawings incorporate the following drawing changes:

In Figs. 1-3, the legend "Related Art" has been added.

It is respectfully requested that the corrected formal drawings be approved and made a part of the record of the above-identified application.

Attachment: Replacement sheets

REMARKS

Applicant appreciates the Examiner's thorough consideration provided the present application. Claims 1-8 are now present in the application. The drawings have been amended. Claim 1 is independent. Reconsideration of this application, as amended, is respectfully requested.

Drawings Objections

The drawings have been objected due to the presence of minor informalities. Applicant has submitted two (2) sheets of corrected formal drawings to address the Examiner's requested changes. Reconsideration and withdrawal of the Examiner's drawings objection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hsu, U.S. Patent No. 6,854,027. This rejection is respectfully traversed.

Independent claim 1 recites "providing a SATA external storage device connected to a power input unit; measuring a variation of current flown from said power input unit to an SATA storage unit of said SATA external storage device; using said variation of current to drive a driving circuit; and using an indicating circuit to indicate said variation of current at said driving circuit and thereby indicating a use state of said SATA external storage device." Applicant respectfully submits that the above combination of steps as set forth in independent claim 1 is not disclosed nor suggested by the reference relied on by the Examiner.

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Hsu in col. 4, lines 1-26 discloses that the host 22 then performs read/write actions to the hard disk 12 connected to channel 1 to let the hard disk 12 generate current variation (Step S14). The current sensor 18 connected to the hard disk 12 detects the current variation, transforms the variation into a voltage signal and transmits the voltage signal to the enclosure-controller 14 connected therewith (Step S16). The enclosure-controller 14 compares the voltage signal variation when the hard disk 12 idles and operates and converts the variation into a flag (Step S18). Subsequently, the host 22 reads the flag in the four enclosure-controllers 14 to build the corresponding relation between channel 1 and one of the enclosure-controllers based on the flag. (Step S20). In other words, the current variation is simply used to build the corresponding relation between channel 1 and one of the enclosure-controllers. Hsu nowhere discloses that the LED lamp (referred to by the Examiner as the indicating circuit of claim 1) is used to indicate the variation of current at the transformer (referred to by the Examiner as the driving circuit of claim 1) and thereby indicating a use state of the SATA external storage device as recited in claim 1.

Although Hsu in col.1, lines 31-34 discloses that the LED lamp is directly connected to the enclosure-control chip in the removable hard disk case to flash when the hard disk malfunctions or is active, Hsu nowhere discloses that the current variation of the transformer has anything to do with the indication of whether the hard disk malfunctions or is active. Hsu merely discloses that when the host finds that the hard disk malfunctions, it will notify the enclosure-controller 14 to control the LED to flash for alarm (see also col. 3, lines 39-41.) Hsu fails to teach the LED lamp is flashed based on the current variation at the transformer. Therefore, Hsu fails to teach "using said variation of current to drive a driving circuit; and using an indicating circuit to indicate said variation of current at said driving circuit and thereby indicating a use

state of said SATA external storage device" as recited in original claim 1. In addition, Hsu puts

the LED lamp in the enclosure-controller chip (FIG. 2), while the present invention is attached to

the "current sensor" block directly, which is one step earlier than Hsu, and clearly indicates the

difference between Hsu and the present invention.

In addition, Hsu is targeting at different setup. In particular, Hsu in col. 2, lines 35-40

discloses "[t]o achieve the above objects, a hard disk device capable of detecting channels of a

host to which hard disk controllers belong of the present invention comprises _at least two hard_

disks, at least two enclosure-controllers, at least two current sensors and at least two serial

buses." Unlike Hsu, the present invention is about an individual hard disk (a SATA storage unit

of the SATA external storage device) as recited in claim 1. The present invention does not

require controller or serial bus at all.

Furthermore, Hsu requires an I^2C bus to communicate with host to flash and control the

LED and requires an extra set of "wires" to the host from the enclosure. On the other hand, one

of the purposes of the present invention is to eliminate this extra cable that is required in Hsu.

In addition, Hsu tries to solve the "confusion" of multiple disks to a multi-channel host.

On the other hands, the present invention provides for a solution for the "no indication" of

activity issue. In particular, Hsu in col.2, line 15-24 discloses "[t]he primary object of the

present invention is to provide a hard disk device capable of _detecting channels of a host to_

which hard disk controllers belong, which compare the current variation when a hard disk idles

or operates _to build the corresponding relations between channels of the host and enclosure-_

controllers of several hard disks, thereby solving the problems of _incorrect flashing light and_

incorrect removal of hard disk in the prior art due to ignorance of the relation between the

channels and the enclosure-controllers." However, the present invention is simply to "indicate the use state of the SATA external storage device via the indicating circuit..."(see page 4, lines 10-11). The present invention aims to solve the problem of the SATA hard disk which does not provide the activity indication function. In other words, the present invention is to solve the problem of "*no light*", not the *wrong lights*.

Since Hsu fails to teach each and every limitation of independent claim 1, Applicant respectfully submits that independent claim 1 and its dependent claims clearly define over the teachings of Hsu. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 102 are respectfully requested.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but merely to show the state of the prior art, no further comments are necessary with respect thereto.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Joe McKinney Muncy, Registration No. 32,334 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By

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Attachments: Replacement Sheets